User Guide

This report contains a wide range of useful information about the lung transplant program at Mayo Clinic Florida (FLSL). The report has three main sections:

A. Program Summary
B. Waiting List Information
C. Transplant Information

The Program Summary is a one-page summary highlighting characteristics of the program, including the number of candidates on the waiting list, the number of transplants performed at the program, the number of patients being cared for by the program, and patient outcomes, including outcomes while on the waiting list (the transplant rate and the death rate while on the waiting list) and outcomes after transplant (patient and graft survival probabilities). If the program performed transplants in both adults and children, survival probabilities for adults and children (pediatrics) are provided separately. For each of the outcomes measures presented, a comparison is provided showing what would be expected at this program if it were performing as similar programs around the country perform when treating similar patients. As part of this comparison, we provide a measure of how certain we are that this program is performing as expected or significantly better or worse than expected. These statements of certainty are provided as footnotes to the figures, so please interpret the numbers in the figures carefully after considering the information in the footnotes. More details regarding these outcome measures are provided in Sections B and C of the report.

The Waiting List Information section contains more detailed information on how many candidates are on the waiting list at the program, the types of candidates on the waiting list, how long candidates typically have to wait for a transplant at this program, how frequently candidates successfully receive a transplant, and how often candidates on the waiting list die before receiving a transplant.

Table B1 shows the activity on this program's waiting list during two recent 1-year periods and provides comparisons to all programs within this program's OPTN region (see http://optn.transplant.hrsa.gov/members/regions.asp for information on OPTN regions) and the nation as a whole. Tables B2 and B3 describe the candidates on the waiting list at this program, with comparisons to candidates waiting in the same donor service area (OPO/DSA) the OPTN region, and the nation as a whole.

Table B4 shows how many candidates were removed from the waiting list because they received a transplant. The program's transplant rate is calculated as the number of candidates who received a transplant divided by the person-years observed at the program (person-years is a combination of how many candidates were on the waiting list along with how long each candidate was followed since some candidates are not on the waiting list for the entire year). The transplant rate and comparisons to what would be expected at this center are presented in Figures B1 and B2. Figure B1 shows the transplant rate compared to what was expected at this program. The expected transplant rate is an estimate of what we would expect at this program if it were performing transplants at rates similar to other programs in the US with similar candidates on their waiting lists. The expected rate is only an estimate, and is made with a certain level of uncertainty. This uncertainty is shown in Figure B2. Figure B2 displays the ratio of the observed to the expected transplant rate. A ratio of 1 indicates that the observed transplant rate was equal to the expected transplant rate, while a ratio less than 1 indicates the observed rate was lower than expected rate and a ratio greater than 1 indicates the observed rate

User Guide

was higher than the expected rate. However, the level of uncertainty must be considered when interpreting these numbers. The 95% confidence interval is also shown on Figure B2. This confidence interval provides a range within which the true ratio of observed to expected transplant rates is likely to be. If this confidence interval includes (crosses) 1.0, then we cannot sy that this program's observed transplant rate is different from what would be expected. The observed deceased donor transplant rate at this program was 104.0 per 100 person-years, and this was lower than would be expected with a 95% confidence interval of [0.53, 0.99] for the ratio of observed to expected transplant rates. Transplant rates are also provided for adult and pediatric patients separately along with comparisons to adult and pediatric rates in the DSA, the OPTN region, and the nation. Please refer to the PSR Technical Methods documentation available at http://www.srtr.org for more detail regarding how expected rates are calculated.

The death rate (also known as the mortality rate) for candidates on the waiting list is presented in Table B5 and Figures B4-B6. These data are presented in the same way as the transplant rate data in the previous section. The intent of these tables and figures is to describe risk of death once candidates are listed rather than while they are listed. Therefore, time at risk and deaths after removal from the waiting list for reasons other than transplant, transfer to another transplant program, or recovery (no longer needing a transplant), and before any subsequent transplant, are included. As with transplant rates, mortality rates should be interpreted carefully taking into consideration the confidence interval displayed in Figure B5. For a complete description of how observed and expected mortality rates are calculated, please refer to the technical documentation available at http://www.srtr.org.

Table B6 presents information on what happens to candidates on the waiting list by three different time points after listing: 6 months, 12 months, and 18 months. The table displays percentages of candidates who have died, been removed from the waiting list, been transplanted, or been transferred or lost-to-follow-up. Tables B7 and B8 provide more detail regarding how many candidates have received a deceased donor transplant by certain time points during the first 3 years after being put on the transplant waiting list. Each row of Tables B7 and B8 presents the percent of candidates who received a deceased donor transplant by each time point. Table B9 presents data on the time it took for different percentages of patients to be transplanted for candidates added to the list between 07/01/2010 and 12/31/2015. The time it took for 5% (the 5th percentile) of patients to receive a transplant at this center was 0.2 months. If "Not Observed" is displayed in the table, then too few candidates received transplants before 06/30/2016 to calculate a particular percentile of transplant times.

The Transplant Information section begins with descriptions of transplant recipients in Tables C1 and C2. Data on recipients of deceased donor transplants are presented (Tables C1D and C2D); if applicable, data on recipients of living donor transplants are presented separately (Tables C1L and C2L). Comparisons to the region and the nation as a whole are provided. A description of the deceased donors used at this program is provided in Table C3D, along with characteristics of living donors in Table C3L, if applicable. Finally, information on the transplant procedure for deceased and living donor transplants is presented in Tables C4D and C4L, respectively.

Starting with Table C5, transplant outcomes are presented along with comparisons to what would be expected at this program and what happened in the nation as a whole. Tables C5-C10 present information on graft survival (survival of the transplanted organ), with data presented separately for adult and pediatric recipients. Patients are followed from the time of transplant until either failure of the

User Guide

transplanted organ or death, whichever comes first. Please refer to the technical methods for more information on these calculations (http://www.srtr.org).

While Tables C5-C10 present data on graft survival, Tables C11-C16 present information on patient survival. For these tables, patients are followed from the time of transplant until death, regardless of whether the transplant is functioning or the patient required another transplant to survive.

Additional information regarding the technical methods and the risk adjustment models used to estimate expected event rates is available on the SRTR website at http://www.srtr.org. We welcome and encourage feedback on these reports. Please feel free to share feedback with the SRTR at the following e-mail: srtr@srtr.org.

Table of Contents

Section	Page
User Guide	i
A. Program Summary	
Program Summary	1
B. Waiting List Information	
Waiting list activity	2
Demographic characteristics of waiting list candidates	3
Medical characteristics of waiting list candidates	4
Deceased donor transplant rates	5
Waiting list mortality rates	6
Waiting list candidate status after listing	7
Percent of candidates with deceased donor transplants: demographic characteristics	8
Percent of candidates with deceased donor transplants: medical characteristics	9
Time to transplant for waiting list candidates	10
C. Transplant Information	
Deceased donor transplant recipient demographic characteristics	11
Deceased donor transplant recipient medical characteristics	12
Deceased donor characteristics	13
Deceased donor transplant characteristics	14
Deceased donor graft survival	15
Deceased donor patient survival	21

A. Program Summary

Figure A1. Waiting list and transplant activity

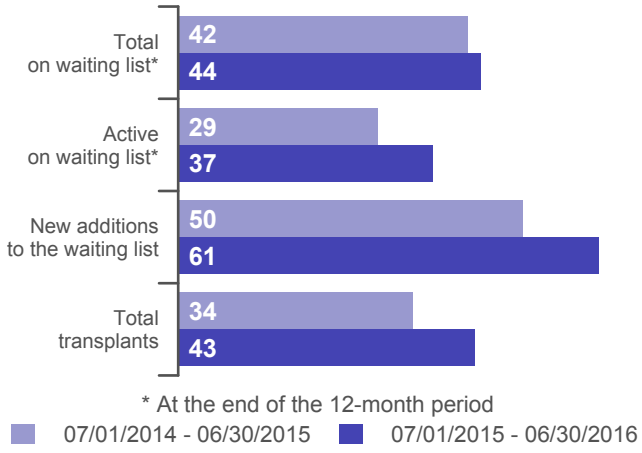
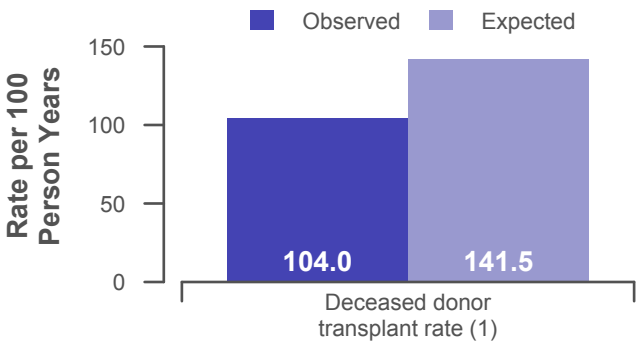


Table A1. Census of transplant recipients

Recipients	07/01/2014-06/30/2015	07/01/2015-06/30/2016
Transplanted at this center	34	43
Followed by this center*	213	213
...transplanted at this program	207	207
...transplanted elsewhere	6	6

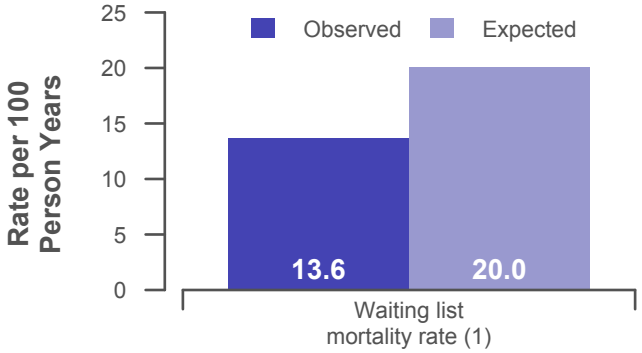
* Recipients followed are transplant recipients for whom the center has submitted a post-transplant follow-up form for a transplant that took place before the 12-month interval for each column.

Figure A2. Transplant rates 07/01/2015 - 06/30/2016



(1) Statistically lower (p=0.042)

Figure A3. Waiting list mortality rates 07/01/2015 - 06/30/2016



(1) Not significantly different (p=0.446)

Figure A4. First-year adult graft and patient survival: 07/01/2013 - 12/31/2015

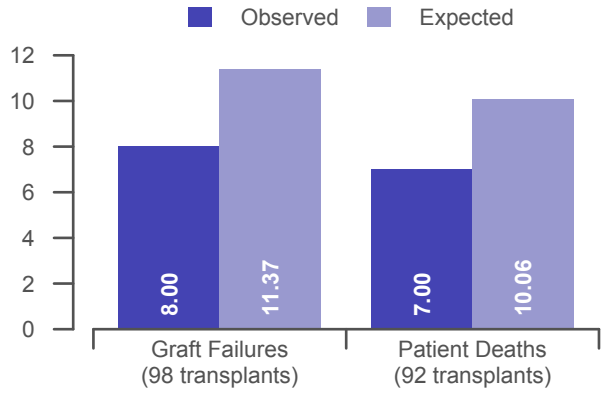
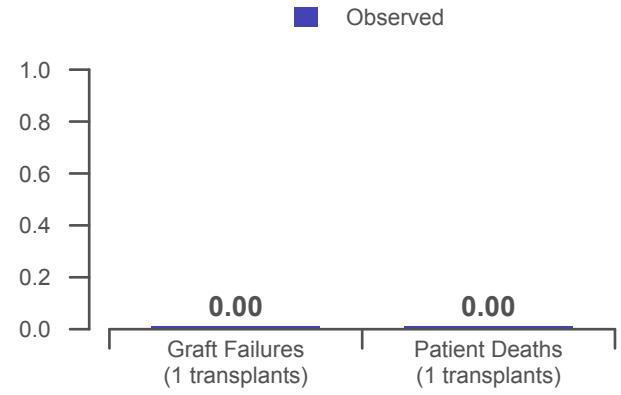


Figure A5. First-year pediatric graft and patient survival: 07/01/2013 - 12/31/2015



B. Waiting List Information

Table B1. Waiting list activity summary: 07/01/2014 - 06/30/2016

Waiting List Registrations	Counts for this center		Activity for 07/01/2015 to 06/30/2016 as percent of registrants on waiting list on 07/01/2015		
	07/01/2014-06/30/2015	07/01/2015-06/30/2016	This Center (%)	OPTN Region (%)	U.S. (%)
On waiting list at start	47	42	100.0	100.0	100.0
Additions					
New listings at this center	50	61	145.2	131.5	174.5
Removals					
Transferred to another center	1	0	0.0	1.4	1.3
Received living donor transplant*	0	0	0.0	0.0	0.0
Received deceased donor transplant*	34	43	102.4	105.1	143.3
Died	3	3	7.1	8.8	11.7
Transplanted at another center	0	4	9.5	2.8	3.4
Deteriorated	4	3	7.1	11.6	11.5
Recovered	3	0	0.0	0.9	2.0
Other reasons	10	6	14.3	13.0	10.3
On waiting list at end of period	42	44	104.8	88.0	91.3

* These patients were removed from waiting list with removal code indicating transplant; this may not equal the number of transplants performed at this center during the specified period.

B. Waiting List Information

Table B2. Demographic characteristics of waiting list candidates
Candidates registered on the waiting list between 07/01/2015 and 06/30/2016

Demographic Characteristic	New Waiting List Registrations 07/01/2015 to 06/30/2016 (%)			All Waiting List Registrations on 06/30/2016 (%)		
	This Center (N=61)	OPTN Region (N=284)	U.S. (N=2,756)	This Center (N=44)	OPTN Region (N=190)	U.S. (N=1,441)
All (%)	100.0	100.0	100.0	100.0	100.0	100.0
Ethnicity/Race (%)*						
White	82.0	79.2	79.0	86.4	75.8	78.3
African-American	9.8	10.2	9.4	4.5	13.2	10.5
Hispanic/Latino	4.9	8.8	8.0	2.3	7.4	7.3
Asian	3.3	1.1	2.8	6.8	2.6	3.1
Other	0.0	0.7	0.8	0.0	1.1	0.8
Unknown	0.0	0.0	0.0	0.0	0.0	0.0
Age (%)						
<2 years	0.0	0.0	0.3	0.0	0.0	0.3
2-11 years	0.0	0.0	0.5	0.0	0.0	1.0
12-17 years	0.0	2.1	1.3	2.3	2.6	1.4
18-34 years	13.1	10.9	9.7	18.2	11.1	10.6
35-49 years	8.2	14.1	12.3	13.6	15.3	17.6
50-64 years	50.8	50.7	47.9	43.2	52.6	49.5
65+ years	27.9	22.2	28.0	22.7	18.4	19.6
Other (includes prenatal)	0.0	0.0	0.0	0.0	0.0	0.0
Gender (%)						
Male	55.7	52.5	56.0	38.6	37.9	39.3
Female	44.3	47.5	44.0	61.4	62.1	60.7

* Race and ethnicity are reported together as a single data element, reflecting their data collection (either race or ethnicity is required, but not both). Patients formerly coded as white and Hispanic are coded as Hispanic. Race and ethnicity sum to 100%.

B. Waiting List Information

Table B3. Medical characteristics of waiting list candidates
Candidates registered on the waiting list between 07/01/2015 and 06/30/2016

Medical Characteristic	New Waiting List Registrations 07/01/2015 to 06/30/2016 (%)			All Waiting List Registrations on 06/30/2016 (%)		
	This Center (N=61)	OPTN Region (N=284)	U.S. (N=2,756)	This Center (N=44)	OPTN Region (N=190)	U.S. (N=1,441)
All (%)	100.0	100.0	100.0	100.0	100.0	100.0
Blood Type (%)						
O	50.8	50.4	46.1	45.5	54.2	48.4
A	34.4	37.3	38.9	43.2	33.7	37.7
B	14.8	9.9	11.7	9.1	10.0	10.6
AB	0.0	2.5	3.3	2.3	2.1	3.3
Unknown	0.0	0.0	0.0	0.0	0.0	0.0
Previous Transplant (%)						
Yes	8.2	6.0	4.1	4.5	4.2	2.9
No	91.8	94.0	95.9	95.5	95.8	97.1
Unknown	0.0	0.0	0.0	0.0	0.0	0.0
Primary Disease (%)						
Idiopathic Pulmonary Arterial Hypertension	0.0	4.6	4.7	0.0	6.3	7.1
Cystic Fibrosis	8.2	11.6	10.6	11.4	9.5	10.4
Idiopathic Pulmonary Fibrosis	80.3	54.9	57.1	50.0	43.2	39.0
Emphysema/COPD	8.2	23.6	24.6	36.4	36.3	39.4
Other	3.3	5.3	3.0	2.3	4.7	4.1
Missing	0.0	0.0	0.0	0.0	0.0	0.0

B. Waiting List Information

Table B4D. Deceased donor transplant rates: 07/01/2015 - 06/30/2016

Waiting List Registrations	This Center	OPO/DSA	Region	U.S.
All Candidates				
Count on waiting list at start*	42	79	216	1,577
Person Years**	41.3	64.7	199.2	1,513.8
Removals for Transplant	43	94	227	2,262
Adult (18+) Candidates				
Count on waiting list at start*	41	75	211	1,536
Person Years**	40.3	60.1	193.3	1,475.4
Removals for transpant	43	93	225	2,222
Pediatric (<18) Candidates				
Count on waiting list at start*	1	4	5	41
Person Years**	1.0	4.6	5.8	38.3
Removals for transplant	0	1	2	40

* Counts in this table may be lower than similar counts in other waiting list tables, such as Table B1. A small percentage (~1%) of patients are found to have died or been transplanted before being removed from the waiting list, so these patients are excluded if the event occurs prior to the start of the study period. Inactive time on the waiting list is included in the calculations for this table.

** Person years are calculated as days (converted to fractional years). The number of days from July 1 or from the date of first wait listing until death, transplant, removal from the waiting list or June 30.

Figure B1D. Observed and expected deceased donor transplant rates: 07/01/2015 - 06/30/2016

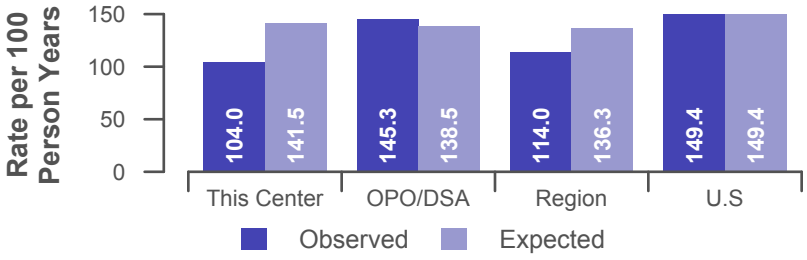


Figure B3D. Observed adult (18+) and pediatric (<18) deceased donor transplant rates: 07/01/2015 - 06/30/2016

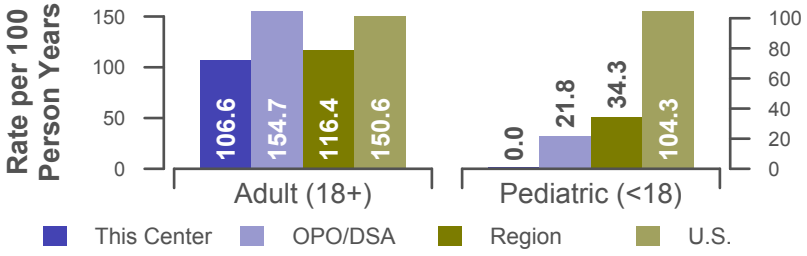
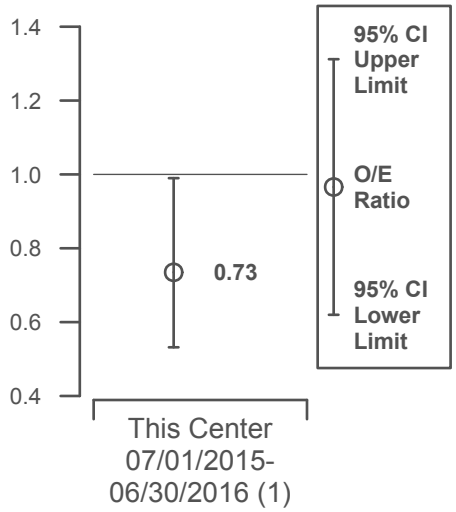


Figure B2D. Ratio of observed to expected deceased donor transplant rates



(1) Lower than expected (p=0.042, 95% CI=[0.53, 0.99])

B. Waiting List Information

Table B5. Waiting list mortality rates: 07/01/2015 - 06/30/2016

Waiting List Registrations	This Center	OPO/DSA	Region	U.S.
All Candidates				
Count on waiting list at start*	42	79	216	1,577
Person Years**	44.1	71.4	216.0	1,625.4
Number of deaths	6	11	38	337
Adult (18+) Candidates				
Count on waiting list at start*	41	75	211	1,536
Person Years**	43.1	66.3	209.0	1,581.2
Number of deaths	6	10	35	324
Pediatric (<18) Candidates				
Count on waiting list at start*	1	4	5	41
Person Years**	1.0	5.2	7.0	44.3
Number of deaths	0	1	3	13

* Counts in this table may be lower than similar counts in other waiting list tables, such as Table B1. A small percentage (~1%) of patients are found to have died or been transplanted before being removed from the waiting list, so these patients are excluded if the event occurs prior to the start of the study period. Inactive time on the waiting list is included in the calculations for this table.

** Person years are calculated as days (converted to fractional years). The number of days from July 1 or from the date of first wait listing until death, transplant, 60 days after recovery, transfer or June 30.

Figure B4. Observed and expected waiting list mortality rates: 07/01/2015 - 06/30/2016

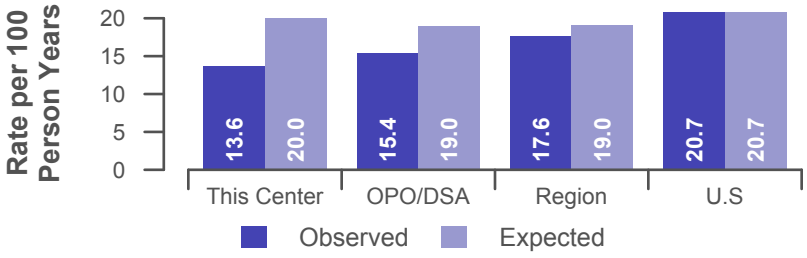


Figure B6. Observed adult (18+) and pediatric (<18) waiting list mortality rates: 07/01/2015 - 06/30/2016

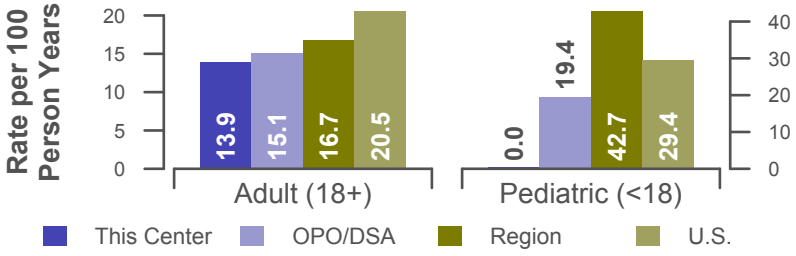
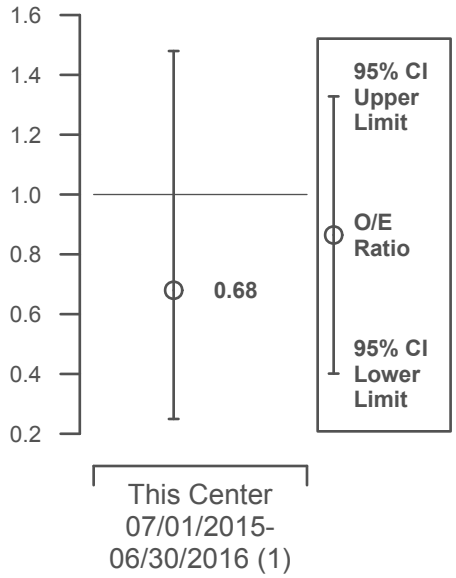


Figure B5. Ratio of observed to expected waiting list mortality rates



(1) Not significantly different (p=0.446, 95% CI=[0.25, 1.48])

B. Waiting List Information

Table B6. Waiting list candidate status after listing
Candidates registered on waiting list between 01/01/2014 and 12/31/2014

Waiting list status (survival status)	This Center (N=51) Months Since Listing			U.S. (N=2,640) Months Since Listing		
	6	12	18	6	12	18
Alive on waiting list (%)	43.1	23.5	13.7	31.5	16.4	10.3
Died on the waiting list without transplant (%)	0.0	0.0	0.0	5.2	6.4	7.0
Removed without transplant (%):						
Condition worsened (status unknown)	5.9	5.9	5.9	3.9	5.6	6.0
Condition improved (status unknown)	0.0	0.0	0.0	0.2	0.5	0.7
Refused transplant (status unknown)	2.0	3.9	3.9	0.1	0.2	0.2
Other	2.0	3.9	3.9	1.9	2.4	2.8
Transplant (living or deceased donor) (%):						
Functioning (alive)	45.1	56.9	51.0	51.9	56.7	40.3
Failed-Retransplanted (alive)	0.0	0.0	0.0	0.2	0.2	0.3
Failed-alive not retransplanted	0.0	0.0	0.0	0.0	0.1	0.0
Died	2.0	5.9	9.8	4.1	7.9	11.1
Status Yet Unknown*	0.0	0.0	11.8	0.7	3.2	20.7
Lost or Transferred (status unknown) (%)	0.0	0.0	0.0	0.3	0.5	0.5
TOTAL (%)	100.0	100.0	100.0	100.0	100.0	100.0
Total % known died on waiting list or after transplant	2.0	5.9	9.8	9.4	14.3	18.1
Total % known died or removed as unstable	7.8	11.8	15.7	13.3	19.9	24.2
Total % removed for transplant	47.1	62.7	72.5	56.9	68.0	72.4
Total % with known functioning transplant (alive)	45.1	56.9	51.0	51.9	56.7	40.3

* Follow-up form covering specified time period not yet completed, and possibly has not become due.

B. Waiting List Information

Table B7. Percent of candidates with deceased donor transplants: demographic characteristics
Candidates registered on the waiting list between 07/01/2010 and 06/30/2013

Characteristic	Percent transplanted at time periods since listing									
	This Center					United States				
	N	30 day	1 year	2 years	3 years	N	30 day	1 year	2 years	3 years
All	181	19.9	54.7	60.2	64.6	7,427	25.3	64.3	70.4	72.5
Ethnicity/Race*										
White	142	20.4	54.9	61.3	65.5	6,095	25.9	65.3	71.6	73.7
African-American	17	17.6	52.9	52.9	58.8	691	22.6	58.9	64.4	66.3
Hispanic/Latino	20	15.0	55.0	60.0	65.0	469	21.7	60.3	66.7	69.7
Asian	2	50.0	50.0	50.0	50.0	136	25.0	58.8	61.0	61.0
Other	0	--	--	--	--	36	19.4	63.9	75.0	75.0
Unknown	0	--	--	--	--	0	--	--	--	--
Age										
<2 years	0	--	--	--	--	43	7.0	55.8	55.8	55.8
2-11 years	0	--	--	--	--	66	6.1	43.9	45.5	47.0
12-17 years	0	--	--	--	--	127	17.3	53.5	58.3	59.1
18-34 years	25	20.0	44.0	52.0	56.0	899	21.5	60.0	65.7	68.2
35-49 years	18	11.1	22.2	27.8	33.3	1,007	21.8	57.2	65.9	67.8
50-64 years	83	22.9	54.2	61.4	66.3	3,565	23.8	63.4	70.1	72.9
65+ years	55	18.2	70.9	72.7	76.4	1,720	34.2	74.3	78.4	79.2
Other (includes prenatal)	0	--	--	--	--	0	--	--	--	--
Gender										
Male	98	24.5	60.2	63.3	68.4	4,105	30.6	72.0	77.1	78.6
Female	83	14.5	48.2	56.6	60.2	3,322	18.7	54.8	62.3	65.1

* Race and ethnicity are reported together as a single data element, reflecting their data collection (either race or ethnicity is required, but not both). Patients formerly coded as white and Hispanic are coded as Hispanic. Race and ethnicity sum to 100%.

B. Waiting List Information

Table B8. Percent of candidates with deceased donor transplants: medical characteristics
Candidates registered on the waiting list between 07/01/2010 and 06/30/2013

Characteristic	Percent transplanted at time periods since listing									
	This Center					United States				
	N	30 day	1 year	2 years	3 years	N	30 day	1 year	2 years	3 years
All	181	19.9	54.7	60.2	64.6	7,427	25.3	64.3	70.4	72.5
Blood Type										
O	76	11.8	47.4	55.3	60.5	3,421	24.0	63.2	69.7	71.8
A	74	27.0	58.1	60.8	66.2	2,914	25.3	64.4	71.0	73.4
B	23	13.0	52.2	60.9	60.9	824	27.8	65.3	69.8	70.9
AB	8	50.0	100.0	100.0	100.0	268	34.7	72.8	75.7	77.2
Previous Transplant										
Yes	20	10.0	55.0	60.0	60.0	418	26.8	61.2	63.4	63.9
No	161	21.1	54.7	60.2	65.2	7,009	25.2	64.4	70.9	73.0
Primary Disease										
Congenital Disease	0	--	--	--	--	0	--	--	--	--
Retransplant/Graft Failure	0	--	--	--	--	24	50.0	83.3	83.3	83.3
Idiopathic Pulmonary Arterial Hypertension	5	40.0	40.0	60.0	60.0	370	12.7	41.4	46.8	48.4
Cystic Fibrosis	18	11.1	22.2	27.8	38.9	941	22.0	64.5	71.8	73.2
Idiopathic Pulmonary Fibrosis	127	22.0	61.4	66.9	70.1	3,894	31.5	70.4	74.8	75.9
Alpha-1-Antitrypsin Deficiency	0	--	--	--	--	0	--	--	--	--
Emphysema/COPD	27	7.4	40.7	44.4	51.9	1,991	17.2	56.9	66.1	70.6
Other	4	50.0	100.0	100.0	100.0	207	20.3	58.0	64.3	67.1
Missing	0	--	--	--	--	0	--	--	--	--

B. Waiting List Information

Table B9. Time to transplant for waiting list candidates*
Candidates registered on the waiting list between 07/01/2010 and 12/31/2015

	Months to Transplant**			
Percentile	**Center**	**OPO/DSA**	**Region**	**U.S.**
5th	0.2	0.2	0.2	0.2
10th	0.3	0.4	0.5	0.3
25th	1.3	1.9	1.6	1
50th (median time to transplant)	6.7	9.5	7.0	4.0
75th	Not Observed	Not Observed	Not Observed	29.7

* If cells contain "Not Observed" fewer than that percentile of patients had recieved a transplant. For example, the 50th percentile of time to transplant is the time when 50% of candidates have received transplants. If waiting times are long,then the 50th percentile may not be observed during the follow-up period for this table. Also, if more than 50% of candidates are removed from the list due to death or other reasons before receiving transplants, then the 50th percentile of time to tranplant will not be observed.

** Censored on 06/30/2016. Calculated as the months after listing, during which the corresponding percent of all patients initially listed had recieved a transplant.

C. Transplant Information

Table C1D. Deceased donor transplant recipient demographic characteristics
Patients transplanted between 07/01/2015 and 06/30/2016

Characteristic	Percentage in each category		
	Center (N=43)	Region (N=227)	U.S. (N=2,262)
Ethnicity/Race (%)*			
White	69.8	79.7	80.2
African-American	20.9	12.8	9.5
Hispanic/Latino	9.3	7.0	7.7
Asian	0.0	0.0	1.9
Other	0.0	0.4	0.8
Unknown	0.0	0.0	0.0
Age (%)			
<2 years	0.0	0.0	0.2
2-11 years	0.0	0.4	0.7
12-17	0.0	0.4	0.8
18-34	9.3	11.9	9.2
35-49 years	11.6	15.4	11.6
50-64 years	53.5	52.0	47.7
65+ years	25.6	19.8	29.8
Unknown	0.0	0.0	0.0
Gender (%)			
Male	55.8	53.7	57.7
Female	44.2	46.3	42.3

* Race and ethnicity are reported together as a single data element, reflecting their data collection (either race or ethnicity is required, but not both). Patients formerly coded as white and Hispanic are coded as Hispanic. Race and ethnicity sum to 100%.

C. Transplant Information

Table C2D. Deceased donor transplant recipient medical characteristics
Patients transplanted between 07/01/2015 and 06/30/2016

Characteristic	Percentage in each category		
	Center (N=43)	Region (N=227)	U.S. (N=2,262)
Blood Type (%)			
O	53.5	46.7	45.8
A	32.6	40.1	39.7
B	14.0	10.6	11.2
AB	0.0	2.6	3.3
Previous Transplant (%)			
Yes	4.7	3.5	3.6
No	95.3	96.5	96.4
Body Mass Index (%)			
0-20	9.3	20.3	21.8
21-25	41.9	38.3	31.1
26-30	48.8	35.2	35.8
31+	0.0	6.2	11.2
Unknown	0.0	0.0	0.2
Primary Disease (%)			
Idiopathic Pulmonary Arterial Hypertension	0.0	2.6	4.0
Cystic Fibrosis	7.0	13.7	12.0
Idiopathic Pulmonary Fibrosis	74.4	50.7	53.5
Emphysema/COPD	7.0	27.3	27.5
Other	11.6	5.7	3.0
Missing	0.0	0.0	0.0
Recipient Medical Condition at Transplant (%)			
Not Hospitalized	69.8	78.0	76.9
Hospitalized	4.7	5.3	10.6
ICU	25.6	16.7	12.3
Unknown	0.0	0.0	0.2

C. Transplant Information

Table C3D. Deceased donor characteristics
Transplants performed between 07/01/2015 and 06/30/2016

Donor Characteristic	Percentage in each category		
	Center (N=43)	Region (N=227)	U.S. (N=2,262)
Cause of Death (%)			
Deceased: Stroke	46.5	33.5	31.2
Deceased: MVA	16.3	16.3	16.5
Deceased: Other	37.2	50.2	52.3
Ethnicity/Race (%)*			
White	67.4	60.4	62.3
African-American	23.3	31.3	18.9
Hispanic/Latino	9.3	7.9	14.8
Asian	0.0	0.4	3.3
Other	0.0	0.0	0.7
Not Reported	0.0	0.0	0.0
Age (%)			
<2 years	0.0	0.0	0.2
2-11 years	2.3	0.9	1.0
12-17	4.7	9.3	7.6
18-34	51.2	44.5	45.4
35-49 years	23.3	27.3	27.3
50-64 years	16.3	16.7	17.3
65+ years	2.3	1.3	1.2
Unknown	0.0	0.0	0.0
Gender (%)			
Male	58.1	61.2	60.3
Female	41.9	38.8	39.7
Blood Type (%)			
O	55.8	54.2	52.3
A	30.2	34.8	35.9
B	14.0	10.1	10.0
AB	0.0	0.9	1.8
Unknown	0.0	0.0	0.0

* Race and ethnicity are reported together as a single data element, reflecting their data collection (either race or ethnicity is required, but not both). Patients formerly coded as white and Hispanic are coded as Hispanic. Race and ethnicity sum to 100%.

C. Transplant Information

Table C4D. Deceased donor transplant characteristics
Transplants performed between 07/01/2015 and 06/30/2016

Transplant Characteristic	Percentage in each category		
	Center (N=43)	Region (N=227)	U.S. (N=2,262)
Total Ischemic Time (Minutes): Local (%)			
Deceased: 0-90 min	0.0	3.2	3.0
Deceased: 91-180 min	6.2	12.1	11.2
Deceased: 181-270 min	31.2	41.1	36.8
Deceased: 271-360 min	43.8	25.8	30.6
Deceased: 361+ min	18.8	17.7	17.3
Not Reported	0.0	0.0	1.2
Total Ischemic Time (Minutes): Shared (%)			
Deceased: 0-90 min	0.0	4.9	2.4
Deceased: 91-180 min	3.7	1.0	1.5
Deceased: 181-270 min	37.0	15.5	16.7
Deceased: 271-360 min	33.3	30.1	36.1
Deceased: 361+ min	25.9	48.5	42.3
Not Reported	0.0	0.0	1.0
Procedure Type (%)			
Lung alone	100.0	100.0	99.5
Lung and another organ	0.0	0.0	0.5
Sharing (%)			
Local	37.2	54.6	56.9
Shared	62.8	45.4	43.1
Median Time in Hospital After Transplant*	14.0 Days	18.0 Days	17.0 Days

* Multiple organ transplants are excluded from this statistic.

C. Transplant Information

Table C5D. Adult (18+) 1-month survival with a functioning deceased donor graft
Single organ transplants performed between 07/01/2013 and 12/31/2015
Deaths and retransplants are considered graft failures

	FLSL	U.S.
Number of transplants evaluated	98	4,795
Estimated probability of surviving with a functioning graft at 1 month (unadjusted for patient and donor characteristics)	96.92%	96.87%
Expected probability of surviving with a functioning graft at 1 month (adjusted for patient and donor characteristics)	96.89%	--
Number of observed graft failures (including deaths) during the first month after transplant	3	150
Number of expected graft failures (including deaths) during the first month after transplant	3.01	--
Estimated hazard ratio*	1.00	--
95% credible interval for the hazard ratio**	[0.32, 2.05]	--

* The hazard ratio provides an estimate of how Mayo Clinic Florida (FLSL)'s results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected graft failure rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected graft failure rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If FLSL's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.32, 2.05], indicates the location of FLSL's true hazard ratio with 95% probability. The best estimate is 0% lower risk of graft failure compared to an average program, but FLSL's performance could plausibly range from 68% reduced risk up to 105% increased risk.

Figure C1D. Adult (18+) 1-month deceased donor graft failure HR estimate

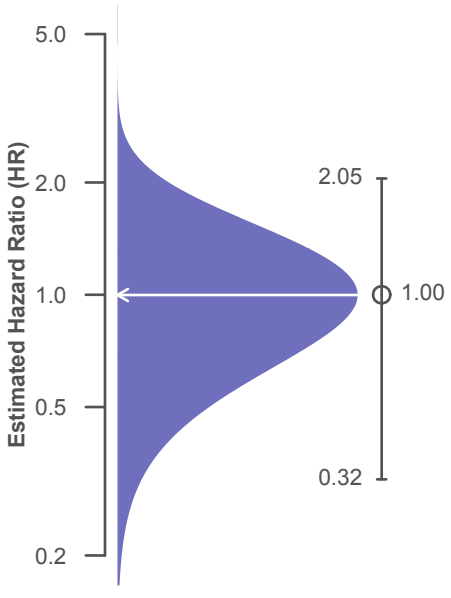
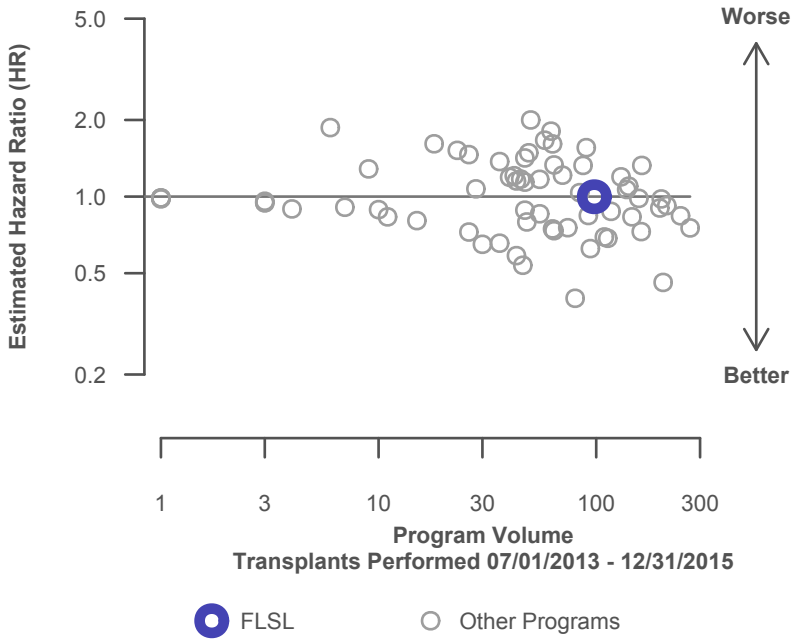


Figure C2D. Adult (18+) 1-month deceased donor graft failure HR program comparison



C. Transplant Information

Table C6D. Adult (18+) 1-year survival with a functioning deceased donor graft
Single organ transplants performed between 07/01/2013 and 12/31/2015
Deaths and retransplants are considered graft failures

	FLSL	U.S.
Number of transplants evaluated	98	4,795
Estimated probability of surviving with a functioning graft at 1 year (unadjusted for patient and donor characteristics)	90.37%	86.81%
Expected probability of surviving with a functioning graft at 1 year (adjusted for patient and donor characteristics)	86.88%	--
Number of observed graft failures (including deaths) during the first year after transplant	8	572
Number of expected graft failures (including deaths) during the first year after transplant	11.37	--
Estimated hazard ratio*	0.75	--
95% credible interval for the hazard ratio**	[0.36, 1.28]	--

* The hazard ratio provides an estimate of how Mayo Clinic Florida (FLSL)'s results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected graft failure rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected graft failure rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If FLSL's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.36, 1.28], indicates the location of FLSL's true hazard ratio with 95% probability. The best estimate is 25% lower risk of graft failure compared to an average program, but FLSL's performance could plausibly range from 64% reduced risk up to 28% increased risk.

Figure C3D. Adult (18+) 1-year deceased donor graft failure HR estimate

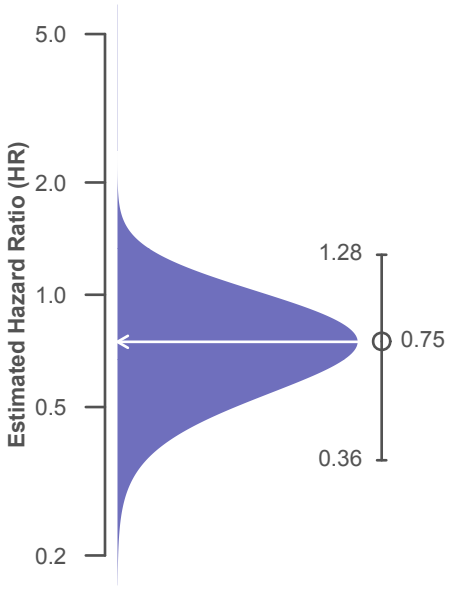
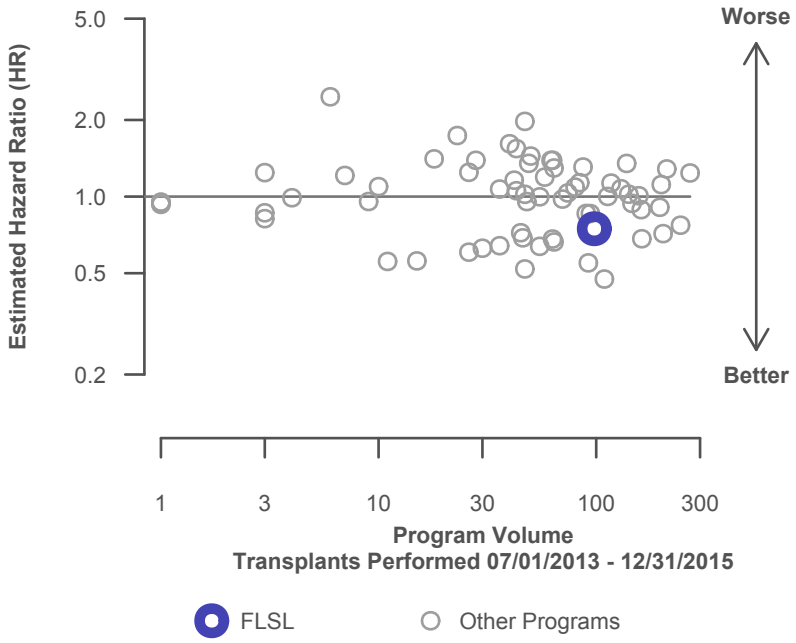


Figure C4D. Adult (18+) 1-year deceased donor graft failure HR program comparison



C. Transplant Information

Table C7D. Adult (18+) 3-year survival with a functioning deceased donor graft
Single organ transplants performed between 01/01/2011 and 06/30/2013
Deaths and retransplants are considered graft failures

	FLSL	U.S.
Number of transplants evaluated	106	4,409
Estimated probability of surviving with a functioning graft at 3 years (unadjusted for patient and donor characteristics)	63.49%	68.46%
Expected probability of surviving with a functioning graft at 3 years (adjusted for patient and donor characteristics)	69.13%	--
Number of observed graft failures (including deaths) during the first 3 years after transplant	38	1,380
Number of expected graft failures (including deaths) during the first 3 years after transplant	32.29	--
Estimated hazard ratio*	1.17	--
95% credible interval for the hazard ratio**	[0.83, 1.55]	--

* The hazard ratio provides an estimate of how Mayo Clinic Florida (FLSL)'s results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected graft failure rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected graft failure rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If FLSL's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.83, 1.55], indicates the location of FLSL's true hazard ratio with 95% probability. The best estimate is 17% higher risk of graft failure compared to an average program, but FLSL's performance could plausibly range from 17% reduced risk up to 55% increased risk.

Figure C5D. Adult (18+) 3-year deceased donor graft failure HR estimate

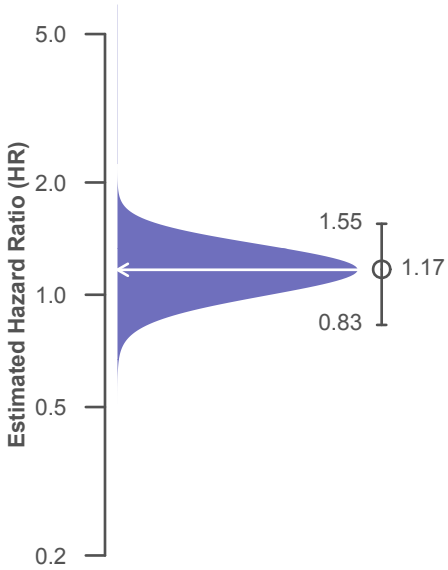
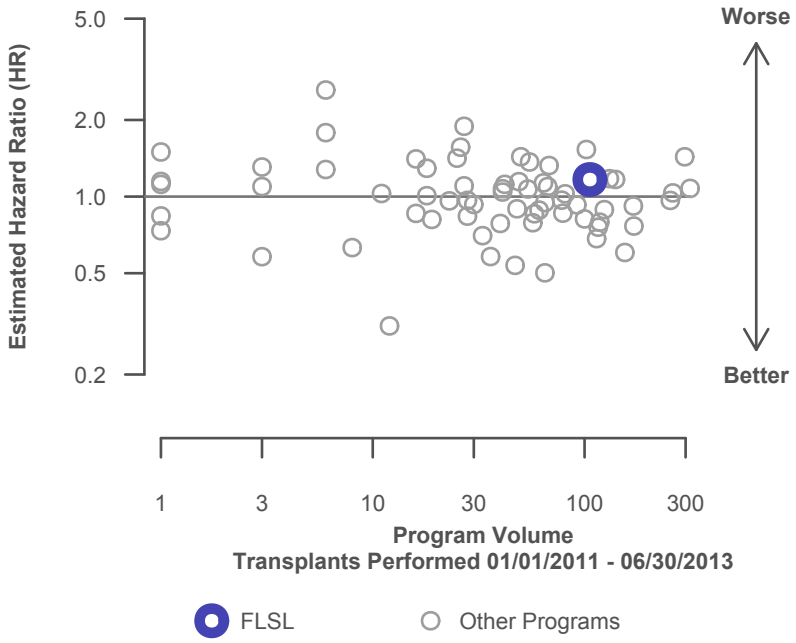


Figure C6D. Adult (18+) 3-year deceased donor graft failure HR program comparison



C. Transplant Information

Table C8D. Pediatric (<18) 1-month survival with a functioning deceased donor graft
Single organ transplants performed between 07/01/2013 and 12/31/2015
Deaths and retransplants are considered graft failures

	FLSL	U.S.
Number of transplants evaluated	1	113
Estimated probability of surviving with a functioning graft at 1 month (unadjusted for patient and donor characteristics)	100.00%	95.58%
Expected probability of surviving with a functioning graft at 1 month (adjusted for patient and donor characteristics)*	--%	--
Number of observed graft failures (including deaths) during the first month after transplant	0	5
Number of expected graft failures (including deaths) during the first month after transplant*	--	--
Estimated hazard ratio*	--	--
95% credible interval for the hazard ratio*	[--, --]	--

* The expected number of graft failures, the hazard ratio, and the credible interval are not calculated for pediatric (<18) recipients.

Figure C7D. Pediatric (<18) 1-month deceased donor graft failure HR estimate

Expected graft failures were not calculated

Figure C8D. Pediatric (<18) 1-month deceased donor graft failure HR program comparison

Expected graft failures were not calculated

C. Transplant Information

Table C9D. Pediatric (<18) 1-year survival with a functioning deceased donor graft
Single organ transplants performed between 07/01/2013 and 12/31/2015
Deaths and retransplants are considered graft failures

	FLSL	U.S.
Number of transplants evaluated	1	113
Estimated probability of surviving with a functioning graft at 1 year (unadjusted for patient and donor characteristics)	100.00%	85.98%
Expected probability of surviving with a functioning graft at 1 year (adjusted for patient and donor characteristics)*	--%	--
Number of observed graft failures (including deaths) during the first year after transplant	0	15
Number of expected graft failures (including deaths) during the first year after transplant*	--	--
Estimated hazard ratio*	--	--
95% credible interval for the hazard ratio*	[--, --]	--

* The expected number of graft failures, the hazard ratio, and the credible interval are not calculated for pediatric (<18) recipients.

Figure C9D. Pediatric (<18) 1-year deceased donor graft failure HR estimate

Expected graft failures were not calculated

Figure C10D. Pediatric (<18) 1-year deceased donor graft failure HR program comparison

Expected graft failures were not calculated

C. Transplant Information

Table C10D. Pediatric (<18) 3-year survival with a functioning deceased donor graft
Single organ transplants performed between 01/01/2011 and 06/30/2013
Deaths and retransplants are considered graft failures

This center did not perform any transplants relevant to this table during 01/01/2011-06/30/2013

Figure C11D. Pediatric (<18) 3-year deceased donor graft failure HR estimate

This center did not perform any transplants relevant to this figure during 01/01/2011-06/30/2013

Figure C12D. Pediatric (<18) 3-year deceased donor graft failure HR program comparison

This center did not perform any transplants relevant to this figure during 01/01/2011-06/30/2013

C. Transplant Information

Table C11D. Adult (18+) 1-month patient survival (deceased donor graft recipients)
Single organ transplants performed between 07/01/2013 and 12/31/2015
Retransplants excluded

	FLSL	U.S.
Number of transplants evaluated	92	4,625
Estimated probability of surviving at 1 month (unadjusted for patient and donor characteristics)	96.74%	97.17%
Expected probability of surviving at 1 month (adjusted for patient and donor characteristics)	97.21%	--
Number of observed deaths during the first month after transplant	3	131
Number of expected deaths during the first month after transplant	2.55	--
Estimated hazard ratio*	1.10	--
95% credible interval for the hazard ratio**	[0.36, 2.25]	--

* The hazard ratio provides an estimate of how Mayo Clinic Florida (FLSL)'s results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected patient death rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected patient death rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If FLSL's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.36, 2.25], indicates the location of FLSL's true hazard ratio with 95% probability. The best estimate is 10% higher risk of patient death compared to an average program, but FLSL's performance could plausibly range from 64% reduced risk up to 125% increased risk.

Figure C13D. Adult (18+) 1-month patient death HR estimate (deceased donor grafts)

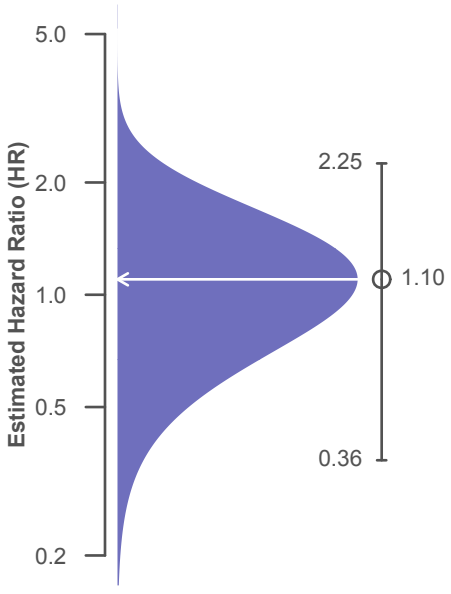
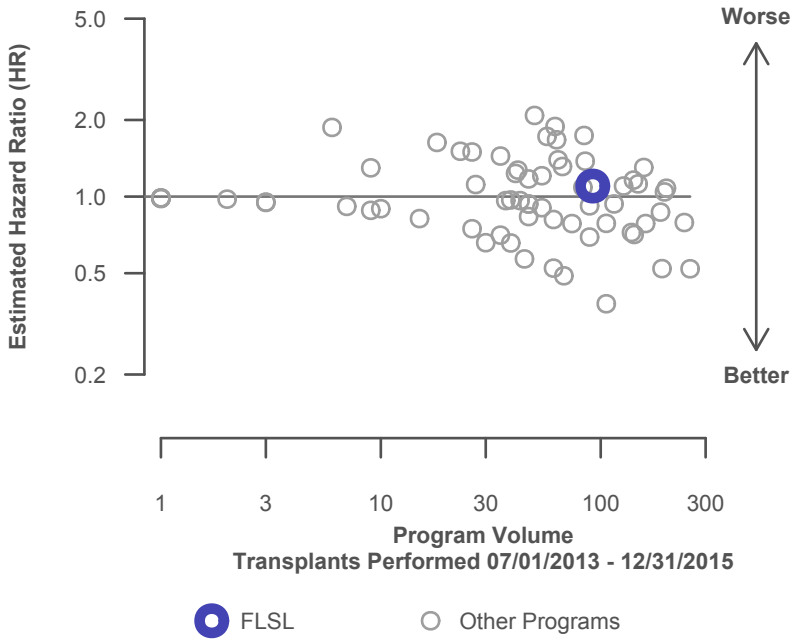


Figure C14D. Adult (18+) 1-month patient death HR program comparison (deceased donor grafts)



C. Transplant Information

Table C12D. Adult (18+) 1-year patient survival (deceased donor graft recipients)
Single organ transplants performed between 07/01/2013 and 12/31/2015
Retransplants excluded

	FLSL	U.S.
Number of transplants evaluated	92	4,625
Estimated probability of surviving at 1 year (unadjusted for patient and donor characteristics)	91.24%	87.59%
Expected probability of surviving at 1 year (adjusted for patient and donor characteristics)	87.74%	--
Number of observed deaths during the first year after transplant	7	522
Number of expected deaths during the first year after transplant	10.06	--
Estimated hazard ratio*	0.75	--
95% credible interval for the hazard ratio**	[0.34, 1.31]	--

* The hazard ratio provides an estimate of how Mayo Clinic Florida (FLSL)'s results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected patient death rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected patient death rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If FLSL's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.34, 1.31], indicates the location of FLSL's true hazard ratio with 95% probability. The best estimate is 25% lower risk of patient death compared to an average program, but FLSL's performance could plausibly range from 66% reduced risk up to 31% increased risk.

Figure C15D. Adult (18+) 1-year patient death HR estimate (deceased donor grafts)

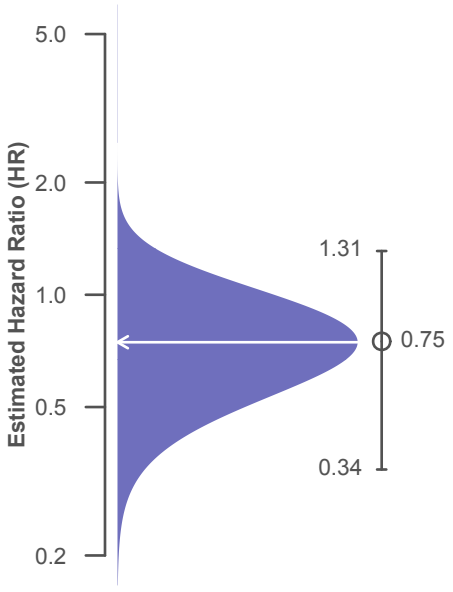
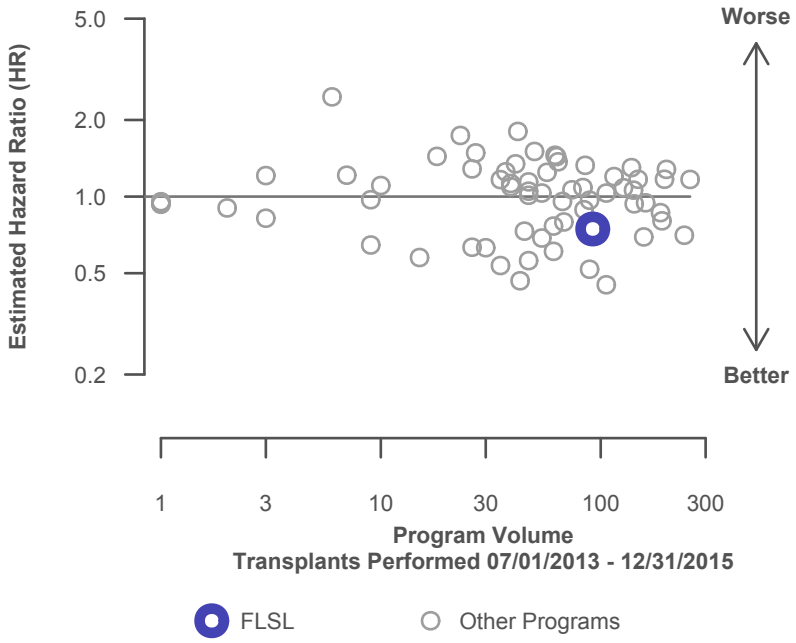


Figure C16D. Adult (18+) 1-year patient death HR program comparison (deceased donor grafts)



C. Transplant Information

Table C13D. Adult (18+) 3-year patient survival (deceased donor graft recipients)
Single organ transplants performed between 01/01/2011 and 06/30/2013
Retransplants excluded

	FLSL	U.S.
Number of transplants evaluated	97	4,204
Estimated probability of surviving at 3 years (unadjusted for patient and donor characteristics)	69.07%	70.27%
Expected probability of surviving at 3 years (adjusted for patient and donor characteristics)	71.34%	--
Number of observed deaths during the first 3 years after transplant	30	1,250
Number of expected deaths during the first 3 years after transplant	28.49	--
Estimated hazard ratio*	1.05	--
95% credible interval for the hazard ratio**	[0.72, 1.44]	--

* The hazard ratio provides an estimate of how Mayo Clinic Florida (FLSL)'s results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected patient death rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected patient death rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If FLSL's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.72, 1.44], indicates the location of FLSL's true hazard ratio with 95% probability. The best estimate is 5% higher risk of patient death compared to an average program, but FLSL's performance could plausibly range from 28% reduced risk up to 44% increased risk.

Figure C17D. Adult (18+) 3-year patient death HR estimate (deceased donor grafts)

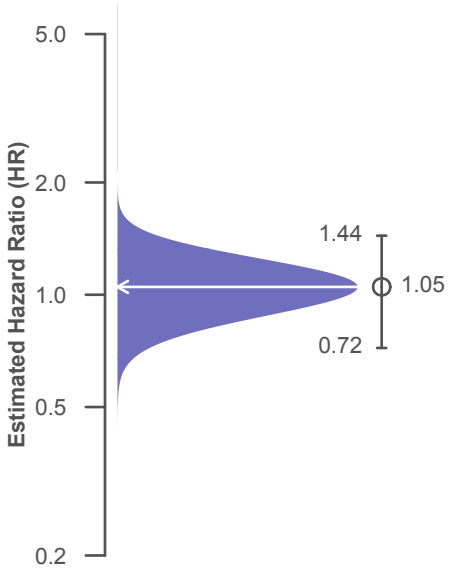
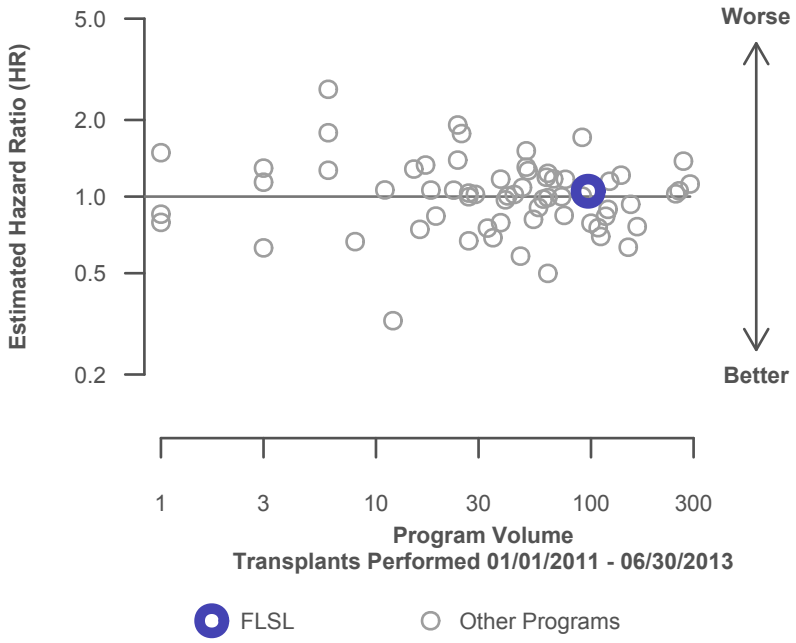


Figure C18D. Adult (18+) 3-year patient death HR program comparison (deceased donor grafts)



C. Transplant Information

Table C14D. Pediatric (<18) 1-month patient survival (deceased donor graft recipients)
Single organ transplants performed between 07/01/2013 and 12/31/2015
Retransplants excluded

	FLSL	U.S.
Number of transplants evaluated	1	104
Estimated probability of surviving at 1 month (unadjusted for patient and donor characteristics)	100.00%	96.15%
Expected probability of surviving at 1 month (adjusted for patient and donor characteristics)*	--%	--
Number of observed deaths during the first month after transplant	0	4
Number of expected deaths during the first month after transplant*	--	--
Estimated hazard ratio*	--	--
95% credible interval for the hazard ratio*	[--, --]	--

* The expected number of patient deaths, the hazard ratio, and the credible interval are not calculated for pediatric (<18) recipients.

Figure C19D. Pediatric (<18) 1-month patient death HR estimate (deceased donor grafts)

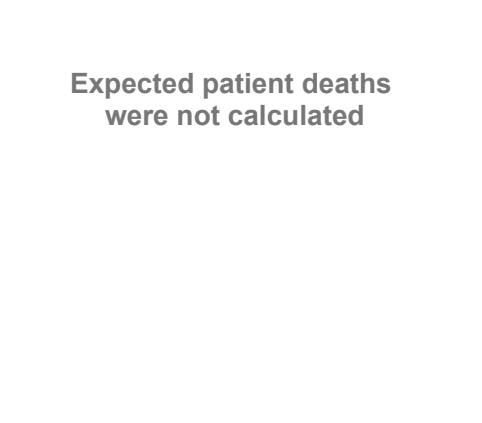
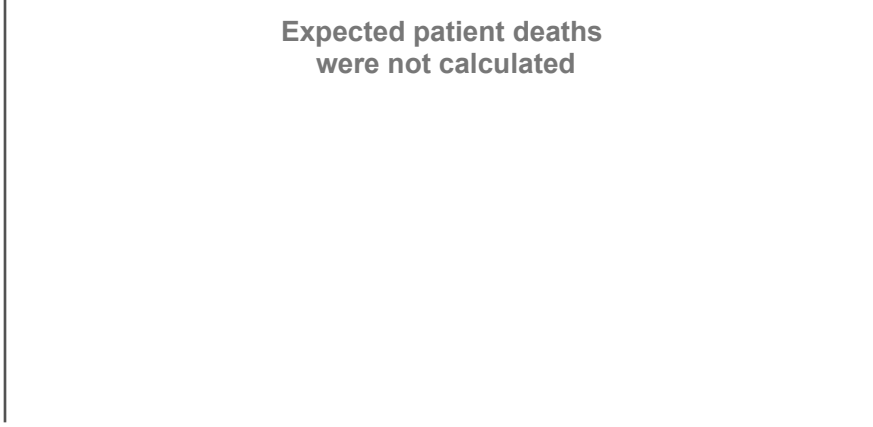


Figure C20D. Pediatric (<18) 1-month patient death HR program comparison (deceased donor grafts)



C. Transplant Information

Table C15D. Pediatric (<18) 1-year patient survival (deceased donor graft recipients)
Single organ transplants performed between 07/01/2013 and 12/31/2015
Retransplants excluded

	FLSL	U.S.
Number of transplants evaluated	1	104
Estimated probability of surviving at 1 year (unadjusted for patient and donor characteristics)	100.00%	85.98%
Expected probability of surviving at 1 year (adjusted for patient and donor characteristics)*	--%	--
Number of observed deaths during the first year after transplant	0	14
Number of expected deaths during the first year after transplant*	--	--
Estimated hazard ratio*	--	--
95% credible interval for the hazard ratio*	[--, --]	--

* The expected number of patient deaths, the hazard ratio, and the credible interval are not calculated for pediatric (<18) recipients.

Figure C21D. Pediatric (<18) 1-year patient death HR estimate (deceased donor grafts)

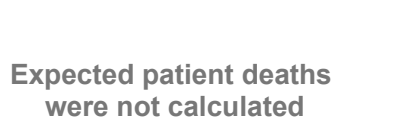
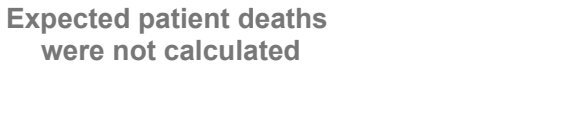


Figure C22D. Pediatric (<18) 1-year patient death HR program comparison (deceased donor grafts)



C. Transplant Information

Table C16D. Pediatric (<18) 3-year patient survival (deceased donor graft recipients)
Single organ transplants performed between 01/01/2011 and 06/30/2013
Retransplants excluded

This center did not perform any transplants relevant to this table during 01/01/2011-06/30/2013

Figure C23D. Pediatric (<18) 3-year patient death HR estimate (deceased donor grafts)

This center did not perform any transplants relevant to this figure during 01/01/2011-06/30/2013

Figure C24D. Pediatric (<18) 3-year patient death HR program comparison (deceased donor grafts)

This center did not perform any transplants relevant to this figure during 01/01/2011-06/30/2013